AMENDMENTS TO THE CLAIMS

1. (Cancel)

2. (Previously Presented) The method of decoding a speech signal according to claim 3, wherein said excitation signal is an excitation vector.

3. (Previously Presented) A method of decoding a speech signal by decoding information on an excitation signal and information on a linear prediction coefficient from a received signal, producing said excitation signal and said linear prediction coefficient from said decoded information, and driving a filter configured with said linear prediction coefficient by said excitation signal, said method comprising the steps of:

calculating a norm of said excitation signal for each fixed period;

smoothing said calculated norm using a norm obtained in a previous period;

changing amplitude of said excitation signal in said period using said calculated norm and said smoothed norm; and

driving said filter by said excitation signal with the changed amplitude wherein the amplitude of said excitation signal is changed by dividing said excitation signal in said period by said norm, and multiplying said excitation signal by said smoothed norm in said period.

4. (Original) The method of decoding a speech signal according to claim 3, wherein said excitation signal with the changed amplitude is switched to and from the excitation signal with an unchanged amplitude in accordance with an inputted switching signal, and said filter is driven by the switched excitation signal.

5. (Previously Presented) The method of decoding a speech signal according to claim 3, wherein said received signal is a signal coded by representing an input speech signal with an excitation signal and a linear prediction coefficient.

6. (Previously Presented) The method of decoding a speech signal according to claim 3, further comprising the step of discriminating between a sound present period and a noise period for said received signal using said decoded information, and wherein the said calculating step, said smoothing step, said changing step and said driving step are performed in said noise period.

7. (Original) The method of decoding a speech signal according to claim 6, wherein said excitation signal is an excitation vector.

8. (Original) The method of decoding a speech signal according to claim 6, wherein the amplitude of said excitation signal is changed by dividing said excitation signal in said period by said norm, and multiplying said excitation signal by said smoothed norm in said period.

9. (Original) The method of decoding a speech signal according to claim 6, wherein nature of said received signal in said noise period is identified based on said decoded information, and processing contents at the said smoothing step are selected based on said identified nature.

10. (Original) The method of decoding a speech signal according to claim 8, wherein said excitation signal with the changed amplitude is switched to and from the excitation signal with an unchanged amplitude in accordance with an inputted switching signal, and said filter is driven by the switched excitation signal.

11. (Previously Presented) The method of decoding a speech signal according to claim 6, wherein said received signal is a signal coded by representing an input speech signal with an excitation signal and a linear prediction coefficient.

12. (Previously Presented) An apparatus for decoding a speech signal by decoding information on an excitation signal and information on a linear prediction coefficient from a received signal, producing said excitation signal and said linear prediction coefficient from said decoded information, and driving a filter configured with said linear prediction coefficient by said excitation signal, said apparatus comprising:

an excitation signal normalizing circuit for calculating a norm of said excitation signal for each fixed period and dividing said excitation signal by said norm;

a smoothing circuit for smoothing said norm using a norm obtained in a previous period; and

an excitation signal restoring circuit for multiplying said excitation signal by said smoothed norm to change amplitude of said excitation signal in said period.

13. (Original) The apparatus of decoding a speech signal according to claim 12, wherein said excitation signal is an excitation vector.

14. (Original) The apparatus of decoding a speech signal according to claim 12, further comprising a sound present/absent discriminating circuit for discriminating between a sound present period and a noise period for said received signal using said

decoded information, and wherein the amplitude of said excitation signal is changed in said noise period.

15. (Original) The apparatus of decoding a speech signal according to claim 14, further comprising a noise classifying circuit for identifying nature of said received signal in said noise period using said decoded information, and wherein said smoothing circuit includes a plurality of smoothing filters with characteristics different from one another, and one of said smoothing filters is selected in accordance with said identified nature.

16. (Original) The apparatus of decoding a speech signal according to claim 15, wherein said excitation signal is an excitation vector.

17. (Original) The apparatus of decoding a speech signal according to claim 12, further comprising a switching circuit for providing said excitation signal produced from said decoded information to one of said excitation signal normalizing circuit and said filter in accordance with an inputted switching signal.

18. (Previously Presented) The apparatus of decoding a speech signal according to claim 12, wherein said received signal is a signal coded by representing an input speech signal with an excitation signal and a linear prediction coefficient.

19. (Previously Presented) The apparatus of decoding a speech signal according to claim 15, wherein said received signal is a signal coded by representing an input speech signal with an excitation signal and a linear prediction coefficient.

20. (Previously Presented) A method of decoding speech signal by decoding information on an excitation signal and information on a linear prediction coefficient from a received signal, producing said excitation signal and said linear prediction coefficient from said decoded information, and driving a filter configured with said linear prediction coefficient by said excitation signal, said method comprising:

calculating a norm of said excitation signal for each fixed period;

smoothing said calculated norm using a norm obtained in a previous period;

changing amplitude of said excitation signal in said period using both of said calculated norm and said smoothed norm; and

driving said filter by said excitation signal with the changed amplitude wherein temporal fluctuation of said excitation signal is reduced.

21. (Previously Presented) A method of decoding a speech signal by decoding information on an excitation signal and information on a linear prediction coefficient from a received signal, producing said excitation signal and said linear prediction coefficient from said decoded information, and driving a filter configured with said linear prediction coefficient by said excitation signal, said method comprising:

calculating a norm of said excitation signal for each fixed period;

smoothing said calculated norm using a norm obtained in a previous period;

changing amplitude of said excitation signal in said period using a relation between said calculated norm and said smoothed norm; and

driving said filter by said excitation signal with the changed amplitude wherein temporal fluctuation of said excitation signal is reduced.

22. (Previously Presented) An apparatus for decoding a speech signal by decoding information on an excitation signal and information on a linear prediction coefficient from a received signal, producing said excitation signal and said linear prediction coefficient from said decoded information, and driving a filter configured with said linear prediction coefficient by said excitation signal, said apparatus comprising:

an excitation signal normalizing circuit for calculating a norm of said excitation signal for each fixed period;

a smoothing circuit for smoothing said norm using a norm obtained in a previous period; and

an excitation signal restoring circuit for changing amplitude of said excitation signal in said period,

wherein said amplitude is changed based on a relation between said calculated norm and said smoothed norm.